CLAIMS

1. An automatic method for operating a service provider for the Internet so as to provide dynamic management of hosted services comprising:

for each of a plurality of customer accounts:

providing a plurality of servers allocated to a common administrative group for that customer account and configured to access software and data unique to that customer account to provide hosted services to the Internet for that customer account;

automatically monitoring each administrative group; and

automatically and dynamically reallocating at least one server from a first administrative group to a second administrative group in response to the automatic monitoring, including:

setting initialization pointers for said at least one server to access software and data unique to the customer account for the second administrative group; and

reinitializing said at least one server such that said at least one server joins the second administrative group.

2. The method of claim 1 wherein the plurality of servers assigned to each administrative group are operably coupled together by an intranet and where the step of automatically monitoring an administrative group is accomplished in part by a communication channel different than the intranet for that administrative group.

3. The method of claim 1 wherein the plurality of servers assigned to the first administrative group are located at a first site and the plurality of servers assigned to the second administrative group are located at a second site geographically remote from the first site and wherein the step of automatic monitoring further comprises automatically replicating at least data for the first administrative group to the second site.

4. The method of claim 1 wherein the step of dynamically reallocating is performed in response to the automatic monitoring in combination with parameters for each customer account defined in service level agreement database.

5. The method of claim 1 wherein the step of automatic monitoring detects a failure of one of the servers in the second administrative group and dynamically allocates at least one of the servers in the first administrative group to replace the failed server in the second administrative group.

6. The method of claim 1 wherein the step of automatic monitoring predicts a workload increase for the servers in the second administrative group and dynamically allocates at least one of the servers in the first administrative group to redistribute the workload increase among a greater number of servers in the second administrative group.

7. The method of claim 1 wherein the step of setting initialization pointers utilizes information maintained in a personality module for each customer account to determine the initialization pointers.

8. The method of claim 1 wherein each server is programmatically connected to the Internet and wherein the step of dynamically reallocating further includes switching said at least one server to be operably connected to the Internet as part of the second administrative group.

9. The method of claim 8 wherein each server is further programmatically connected a disk storage unit and wherein the step of dynamically reallocating further includes switching said at least one server to be operably connected to a portion of the disk storage unit storing software and data unique to the customer account of the second administrative group.

10. The method of claim 1 wherein the step of dynamically reallocating further comprises billing a customer account at a higher rate for the hosted services when said at least one server is dynamically reallocated to that customer account.

11. A system for providing dynamic management of hosted services for the Internet provided to multiple customer accounts comprising:

at least five servers operably connected to an intranet, each server having host management circuitry providing a communication channel with at least one of the other servers that is separate from the intranet;

at least four of the servers executing a local decision software program that monitors the server and communicates status information across the communication channel;

at least two of the servers allocated to a first administrative group for a first customer account and configured to access software and data unique to the first customer account to provide hosted services to the Internet for that customer account;

at least two of the servers allocated to a second administrative group for a second customer account and configured to access software and data unique to the second customer account to provide hosted services to the Internet for that customer account; and

at least one of the servers executing a master decision software program that collects status information from the other servers and dynamically reallocates at least one server from the first administrative group to the second administrative group in response to at least the status information.

12. The system of claim 11 wherein the master decision software program dynamically reallocates said at least one server by using the communication channel to set initialization pointers for said at least one server to access software and data unique to the customer account for the second administrative group and reinitializing said at least one server such that said at least one server joins the second administrative group.

13. The system of claim 11 further comprising a network switch operably connected between the Internet and each server wherein each server is programmatically connected to the Internet under control of the master decision software program.

14. The system of claim 11 further comprising a disk storage unit programmatically connected to all of the servers wherein the master decision software program switches said at least one server to

be operably connected to a portion of the disk storage unit storing software and data unique to the customer account of the second administrative group.

15. The system of claim 11 wherein the plurality of servers assigned to the first administrative group are located at a first site and the plurality of servers assigned to the second administrative group are located at a second site geographically remote from the first site and wherein the system further comprises means for automatically replicating at least data for the first administrative group to the second site.

16. The system of claim 11 wherein the master decision software comprises:

a resource database;

a service level agreement database;

a master decision logic module having access to the resource database and the service level agreement database and comparing the status information to information in the resource database and the service level agreement database to determine whether to dynamically at reallocate said at least one server from the first customer account to the second customer account; and

a dispatch module operably linked to the master decision logic module to dynamically reallocate said at least one server when directed by the master decision logic module by using the communication channel to set initialization pointers for said at least one server to access software and data unique to the customer account for the second administrative group and reinitializing said at least one server such that said at least one server joins the second administrative group.

17. The system of claim 16 wherein the dispatch module further includes a set of connectivity rules and a set of personality modules for each customer account.

18. The system of claim 11 wherein the local decision software program includes a plurality of measurement modules having outputs which are aggregated into a predictor routine to determine expected response times and probabilities for that server.

19. The system of claim 18 wherein the local decision software program for a given server further comprises a fuzzy logic inference system connected at least to outputs of the predictor routine to initiate a request to add or remove servers from the administrative group associated with that server.

20. The system of claim 19 wherein the master decision software program balances the request to add or remove servers from all of the local decision software programs with information in a resource database and a service level agreement database to determine whether to dynamically reallocate said at least one server from the first administrative group to the second administrative group.

21. An automatic method for operating a service provider for the Internet so as to provide dynamic management of hosted services comprising:

for each of a plurality of customer accounts:

providing a plurality of servers allocated to a common administrative group for that customer account and configured to access software and data unique to that customer account to provide hosted services to the Internet for that customer account;

establishing a pool of a plurality of virtual servers that may be selectively configured to access software and data for each of the plurality of customer accounts;

automatically monitoring each administrative group;

automatically allocating at least one virtual server to join the plurality of servers of a first administrative group in response to the automatic monitoring, including:

setting initialization pointers for said at least one virtual server to access software and data unique to the customer account for the second administrative group; and

reinitializing said at least one virtual server such that said at least one server joins the first administrative group.

22. The method of claim 21 wherein at least a portion of the pool of the plurality of virtual servers are created on an as-needed basis in response to the automatic monitoring.

23. The method of claim 22 further comprising automatically deallocating at least one of the plurality of servers of a second administrative group and assigning that at least one server to the pool of virtual servers in response to the automatic monitoring.

24. The method of claim 21 wherein the step of setting the initialization pointers utilizes information maintained in a personality module unique to each administrative group.

25. The method of claim 21 wherein the step of setting the initialization pointers precludes a virtual server from having access to software and data associated with any customer account other than the customer account associated with the administrative group to which the virtual server is allocated.

26. The method of claim21 wherein more than one virtual server is simultaneously allocated to the first administrative group.